Dmitri Schebarchov

List of Publications by Citations

33 papers	617 citations	17 h-index	24 g-index
34 ext. papers	675 ext. citations	5.7 avg, IF	4.25 L-index

#	Paper	IF	Citations
33	Capillary absorption of metal nanodroplets by single-wall carbon nanotubes. *Nano Letters*, **2008**, 8, 2253-7	11.5	61
32	Superheating and solid-liquid phase coexistence in nanoparticles with nonmelting surfaces. *Physical Review Letters*, **2006**, 96, 256101	7.4	37
31	Solid-liquid phase coexistence and structural transitions in palladium clusters. *Physical Review B*, **2006**, 73,	3.3	36
30	Simple accurate approximations for the optical properties of metallic nanospheres and nanoshells. *Physical Chemistry Chemical Physics*, **2013**, 15, 4233-42	3.6	34
29	Dynamics of capillary absorption of droplets by carbon nanotubes. *Physical Review E*, **2008**, 78, 046309	2.4	32
28	Static, transient, and dynamic phase coexistence in metal nanoclusters. *Journal of Chemical Physics*, **2005**, 123, 104701	3.9	32
27	Transition from icosahedral to decahedral structure in a coexisting solid-liquid nickel cluster. *Physical Review Letters*, **2005**, 95, 116101	7.4	31
26	Electronic effects on the melting of small gallium clusters. *Journal of Chemical Physics*, **2012**, 137, 144307	3.9	29
25	Communication: a new paradigm for structure prediction in multicomponent systems. *Journal of Chemical Physics*, **2013**, 139, 221101	3.9	28
24	Throwing jellium at gallium--a systematic superatom analysis of metalloid gallium clusters. *Physical Chemistry Chemical Physics*, **2011**, 13, 21109-15	3.6	28
23	Uptake and withdrawal of droplets from carbon nanotubes. *Nanoscale*, **2011**, 3, 134-41	7.7	26
22	Structure, thermodynamics, and rearrangement mechanisms in gold clusters-insights from the energy landscapes framework. *Nanoscale*, **2018**, 10, 2004-2016	7.7	25
21	Grand and Semigrand Canonical Basin-Hopping. *Journal of Chemical Theory and Computation*, **2016**, 12, 902-9	6.4	21
20	Quasi-combinatorial energy landscapes for nanoalloy structure optimisation. *Physical Chemistry Chemical Physics*, **2015**, 17, 28331-8	3.6	20
19	Structure prediction for multicomponent materials using biminima. *Physical Review Letters*, **2014**, 113, 156102	7.4	20
18	Electronic shell structure in Ga12 icosahedra and the relation to the bulk forms of gallium. *Physical Chemistry Chemical Physics*, **2012**, 14, 9912-22	3.6	20
17	Core–Shell Bimetallic Nanoparticle Trimers for Efficient Light-to-Chemical Energy Conversion. *ACS Energy Letters*, **2020**, 5, 3881-3890	20.1	18

16	Interplay of wetting and elasticity in the nucleation of carbon nanotubes. *Physical Review Letters*, **2011**, 107, 185503	7.4	16
15	Impurity effects on solid-solid transitions in atomic clusters. *Nanoscale*, **2016**, 8, 18326-18340	7.7	13
14	Approximate T matrix and optical properties of spheroidal particles to third order with respect to size parameter. *Physical Review A*, **2019**, 99,	2.6	12
13	Filling a nanoporous substrate by dewetting of thin films. *Nanoscale*, **2013**, 5, 1949-54	7.7	12
12	Thermal instability of decahedral structures in platinum nanoparticles. *European Physical Journal D*, **2007**, 43, 11-14	1.3	10
11	Effects of epitaxial strain on the melting of supported nickel nanoparticles. *Physical Review B*, **2011**, 84,	3.3	9
10	Molecular dynamics study of the melting of a supported 887-atom Pd decahedron. *Journal of Physics Condensed Matter*, **2009**, 21, 144204	1.8	9
9	Reverse capillary action in carbon nanotubes: sucking metal nanoparticles out of nanotubes. *Small*, **2011**, 7, 737-40	11	8
8	Structure and Thermodynamics of Metal Clusters on Atomically Smooth Substrates. *Journal of Physical Chemistry Letters*, **2017**, 8, 5402-5407	6.4	7
7	Degenerate Ising model for atomistic simulation of crystal-melt interfaces. *Journal of Chemical Physics*, **2014**, 140, 074704	3.9	5
6	Superheating in metal nanoparticles with non-melting surfaces. *European Physical Journal D*, **2009**, 53, 63-68	1.3	5
5	In Situ Visualization of Site-Dependent Reaction Kinetics in Shape-Controlled Nanoparticles: Corners vs Edges. *Journal of Physical Chemistry C*, **2019**, 123, 14746-14753	3.8	3
4	Healing and sealing carbon nanotubes--growth and closure within a transmission electron microscope. *Nanoscale*, **2011**, 3, 1493-6	7.7	1
3	Molecular dynamics simulations of nanoparticles. *International Journal of Nanotechnology*, **2009**, 6, 274	1.5	1
2	Multiple scattering of light in nanoparticle assemblies: User guide for the terms program. *Journal of Quantitative Spectroscopy and Radiative Transfer*, **2022**, 284, 108131	2.1	1
1	Comment on "Dynamic catalyst restructuring during carbon nanotube growth". *ACS Nano*, **2011**, 5, 685; author reply 686-7	16.7	